

Amendment/Response

Reply to Office Action of July 15, 2003

REMARKS/DISCUSSION OF ISSUES

Claims 6-10 are pending in this application, with claims 6-8 being allowed and claims 9-10 being rejected.

The Examiner is again respectfully requested to state whether the drawings are acceptable.

Rejections under 35 U.S.C. § 102(a)

Claim 10 is rejected under 35 U.S.C. § 102(a) over Satoru et al. The rejection is respectfully traversed. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP § 2131.

It is respectfully suggested that the Examiner is making an unwarranted assumption that the outer surface layer in Satoru et al. has to be more corrosion resistant because it protects. What does the Satoru et al. reference itself say? The reference is silent regarding corrosion resistance. Claim 10 specifically recites, "forming a first layer on said head face of a first material which is more sensitive to corrosion than said materials in said head face; and forming a second layer on said first layer at said transducing gap and on both sides thereof of a second material of a wear-resistant material that is more insensitive to corrosion than said first material." Satoru et al. makes no mention whatsoever of corrosion or sensitivity to corrosion. The Examiner is simply stating a conclusion without any evidence in the reference to support the conclusion. Thus, the standard for anticipation as set forth in the MPEP is not met by the rejection. Reconsideration of the rejection of claim 10 under 35 U.S.C. § 102(a) is therefore respectfully requested.

Rejections under 35 U.S.C. § 103(a)

Claim 9 is rejected under U.S.C. § 103(a) as being unpatentable over Satoru et al. in view of Waldkircher. The rejection of the claims, as amended, is respectfully traversed.

One of the requirements for a *prima facie* case of obviousness is that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally

Amendment/Response

Reply to Office Action of July 15, 2003

available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. MPEP § 2143. As Section 2143.01 states, the prior art must suggest the desirability of the claimed invention, and the fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness.

Waldkircher discloses applying a wear-resistant layer of titanium nitride, with a thickness of at least 200 nm ("ist als 0,2 µm", page 5 line 3 of the German published application), directly to a magnetic head, whereas Satoru et al. discloses applying a BN layer, with a thickness labeled only as a "thin film", on top of a middle layer, with a thickness of from 1-500 nm, which in turn is applied to the magnetic head. In contrast, claim 9 of the present application recites "depositing a first layer comprising mainly a material selected from the group consisting of Ti, Zr, Hf, V, Nb, Ta, Al, and Zn on a head face of the head; and depositing a second layer on the first layer, wherein the second layer comprises a material selected from the group of chromium oxide, chromium nitride, hafnium nitride, titanium nitride, chromium carbide, titanium carbide, and tungsten carbide; wherein the first layer has a thickness of between 1 nm and 20 nm, and the second layer has a thickness of between 10 nm and 100 nm."

There is no motivation found in Waldkircher to use a middle layer as used by Satoru et al., nor is there any motivation found in Satoru et al. to use a material other than boron nitride as the outer layer. Satoru et al. specifically states (in the Constitution portion of the PAJ document) that the boron nitride film has about a 1-60 ratio of B to N and contains high hardness c-BN or W-BM having superior thermal and chemical stability. There is certainly no mention that other materials would be suitable. In addition to not disclosing a middle layer, Waldkircher specifically states that the titanium nitride layer is at least 200 nm thick, whereas claim 9 of the present invention specifically recites that the second layer is between 10 nm and 100 nm. In short, there is nothing in either reference that would lead one to combine the features as selected for the rejection. Note that using the at least 200 nm layer of Waldkircher instead of the BN layer of Satoru et al. still would not produce the thickness limitations as required by claim 9.

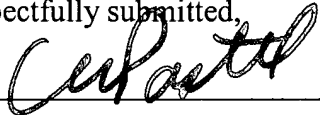
Amendment/Response

Reply to Office Action of July 15, 2003

Thus, the standard for unpatentability as set forth in the MPEP is not met by the rejection. Reconsideration of the rejection of claim 9 under 35 U.S.C. § 103(a) is therefore respectfully requested.

In view of the foregoing, Applicants respectfully request that the Examiner withdraw the rejections of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact Eric Bram, not the undersigned, at (914) 333-9635.

Respectfully submitted,



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